

CLAIMS

1. A speech input guidance method for a speech input guidance device comprising:

detecting a device operation by a user;

5 searching for a speech input executing command corresponding to the device operation from a speech input guidance data accumulating unit; and providing the user with searched speech input guidance.

2. A speech input guidance device comprising:

10 a device operation detecting unit for detecting a device operation by a user;

a speech input guidance data accumulating unit for recording speech input guidance data for guiding the user to a command to be executed by means of speech for device operations categorized by device operation type;

15 a data searching unit for searching for, and providing speech input guidance data corresponding to, the device operation detected by said device operation detecting unit from said speech input guidance data accumulating unit; and

a speech input guidance output unit for providing the user with data searched by said data searching unit.

20 3. The speech input guidance device according to claim 2 wherein said speech input guidance output unit is provided with at least one of a guidance speech output unit for guiding by speech, and a guidance screen display output unit for showing guidance on a screen.

25 4. The speech input guidance device according to claim 2 wherein said device operation detecting unit detects at least one of a switch operation, a rotary encoder operation, a touch panel operation, and a cursor operation.

5 5. The speech input guidance device according to claim 2 further comprising a speech input guidance controlling unit for providing whether or not speech input guidance is to be conducted, wherein the speech input guidance is stopped when the speech input guidance controlling unit provides an output for stopping the speech input guidance.

 6. The speech input guidance device according to claim 5 wherein said speech input guidance controlling unit stops the speech input guidance when the operation of a device for providing an audio output is detected.

 7. The speech input guidance device according to claim 5 wherein said speech input guidance controlling unit stops the speech input guidance when the operation of a radio is detected.

 8. The speech input guidance device according to claim 5 wherein said speech input guidance controlling unit stops the speech input guidance when the operation of route guidance by speech of a navigation device is detected.

15 9. The speech input guidance device according to claim 6 wherein at least one of guidance with a screen and a confirmation sound for indicating that a speech input is available is provided when the speech input guidance is stopped.

 10. The speech input guidance device according to claim 5 wherein when route guidance for a navigation device is shown on a guidance display screen, said speech input guidance controlling unit stops guidance on the same screen.

20 11. The speech input guidance device according to claim 5 further comprising a data recording unit for recording counts of the outputs categorized by the device operation type from said speech input guidance output unit into the speech input guidance data accumulating unit, wherein said speech input guidance controlling unit uses the data searching unit to search for/receive a count of

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outputs corresponding to a device operation, and stops the speech input guidance when said count of outputs exceeds a predetermined number.

5 12. The speech input guidance device according to claim 10 wherein a count of guidance speech outputs and a count of a guidance screen display outputs are recorded separately into said data recording unit, the speech input guidance controlling unit stops guidance entirely when either one of the counts exceeds a predetermined number, stops only the guidance speech output when the count of guidance speech outputs exceeds a predetermined number, or stops only the guidance screen display output when the count of guidance screen display outputs exceeds a predetermined number.

10 13. The speech input guidance device according to claim 5 further comprising:
a speech input execution detecting unit for detecting a speech input for a device operation; and
15 a data recording unit for recording the number of the speech inputs categorized by the device operation type based on signals detected by the speech input execution detecting unit into the speech input guidance data accumulating unit,

20 wherein said speech input guidance controlling unit uses said data searching unit to search for/receive a count of speech inputs corresponding to a device operation, and stops the speech input guidance when said count of speech inputs exceeds a predetermined number.

25 14. A speech input guidance device comprising:
a speech input guidance data accumulating unit for recording speech input executing commands categorized by operation object;
a speech input guidance output request detecting unit for detecting a speech input guidance output request from a user;

a data searching unit for searching for and providing data in said speech input guidance data accumulating unit according to an output from said speech input guidance output request detecting unit; and

a speech input guidance output unit for providing speech input executing commands searched by said data searching unit as one of by a display screen and by speech.

15. The speech input guidance device according to claim 14 wherein said speech input guidance data accumulating unit records speech input executing commands for indicating an operation object and commands for a speech input for indicating the content of an operation applied to the operation object while they are being associated with each other, and when said speech input guidance output request detecting unit detects that a user enters only one of said speech input executing command for indicating an operation object and said speech input executing command for indicating an operation content, said data searching unit searches for and provides a speech input executing command for indicating an operation object or a speech input executing command for indicating an operation content corresponding to the speech input executing command detected by said speech input detecting unit from said speech input guidance data accumulating unit.

16. The speech input guidance device according to claim 14 wherein said speech input guidance data accumulating unit records speech input executing commands for paraphrasing the individual speech input executing commands, and said speech input guidance output unit provides paraphrasing speech input executing commands corresponding to an entered speech input executing command.

17. The speech input guidance device according to claim 14 wherein said speech input guidance data accumulating unit records at least one of the counts of outputs from said speech input guidance output unit and the dates of the outputs for individual speech input executing commands, and said speech input

guidance output unit changes the order of guidance and provides it according to at least one of the counts of outputs and the dates of outputs.

18. The speech input guidance device according to claim 14 wherein said speech input guidance data accumulating unit records counts of outputs from said speech input guidance output unit for the individual speech input executing commands, and if said count for a speech input executing command is more than a predetermined number, the speech input guidance output unit provides a guidance output of that command in a form different from that of the other commands, or stops the output.

19. A speech input guidance device comprising:
a speech input guidance data accumulating unit for recording speech input executing commands and mutual correspondences among the speech input executing commands;
a speech input detecting unit for detecting/providing a speech input operation by a user;
a data searching unit for searching for/providing speech input executing commands relating to said entered speech input executing command based on an output from said speech input detecting unit; and
a speech input guidance output unit for providing the speech input executing commands searched by said data searching unit as at least one of by a display screen and by speech.

20. The speech input guidance device according to claim 14 further comprising:
a speech input executing command indicating means for specifying one of the speech input executing commands provided on the screen from said speech input guidance output unit; and
a device operation means for conducting an operation specified by said speech input executing command indicating means.